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Patent Application

of

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for

COOLING DEVICE

Field of the Invention

The present invention relates to a cooling device comprising a cooling unit through which a fluid to be cooled, in particular hydraulic oil, can flow. The unit has a device housing and at least one filter unit for filtration of the fluid.

Background of the Invention

These cooling devices can be used for a plurality of applications, and are available in the most varied embodiments. The cooling device systems freely available on the market to date however all have either a filter unit flanged to the cooling unit, or tank units connected to the cooling units with the respective tank unit holding the filter element. The known cooling devices are therefore generally formed of several components. The actual cooling unit can be connected by the corresponding piping to the actual filter unit as the cooling device is being produced. Misconnections can then occur in the piping, and consequently malfunction sources occur in the installation of the known cooling devices. Furthermore, the known cooling device solutions are structurally large due to the diversity of their parts and accordingly heavy. This characteristic is especially disadvantageous for mobile use.

In the known cooling device according to WO 01/65123 A1, the cooling unit and the filter unit are combined with each other in one piece. The filter unit together with the cooling unit is